APPENDIX

Changes to Abstract:

An Abstract has been added to the specification.

Changes to Specification:

Page 1, between lines 1 and 2, new headings are added.

Page 1, between lines 5 and 6, a new heading is added.

Page 1, lines 6-12:

~~Such~~ Coordinate measuring machines are used for measuring workpieces, and typically comprise an arm movable in three directions x, y and z relative to a table on which the workpiece is supported. Movements of the arm in each of the x, y and z directions are measured by transducers on the machine, so that the position of the arm relative to a datum position can be determined.

Page 3, between lines 12 and 13, a new heading is added.

Page 5, between lines 26 and 27, a new heading is added.

Page 6, between lines 10 and 11, a new heading is added.

Page 10, lines 12-21:

The laser, beamsplitter and detector of the optical sensing system are mounted on a base plate 64 of the extension 50, and are therefore in a fixed position relative to the displaceable stylus tip. A circuit board 66 is also supported on the base plate by means of three pillars 68, 69, only two of which are shown. The circuit board carries some of the electronics required by the optical sensing system and is electrically connected (by means not shown) to spring loaded contact pins 70 which carry electrical signals from the stylus carrier to the housing 16.

Changes to Claims:

Claim 1 is canceled.

A

Claims 2-5 are amended.

The following are marked-up versions of the amended claims:

2. (Amended) A surface sensing device according to claim ~~1~~ 3 wherein the light source and the detector are mounted to fixed structure to which the stylus is connected ~~and an optical component is mounted adjacent the tip of the stylus to return the beam to the detector~~.

3. (Amended) ~~A surface sensing device according to claim 2~~ A surface sensing device for use in position determining apparatus and which includes a hollow stylus having a workpiece-contacting tip and an optical transducer system, said optical transducer system comprising a light source for producing a beam of light directed internally of the stylus towards the tip of the stylus, an optical component mounted adjacent the tip of the stylus to return the beam, and a detector positioned relative to the returned beam to receive the beam and to produce a signal indicative of a lateral displacement of the stylus tip, wherein the optical component is a retro-reflecting device which is substantially insensitive to tilting of the stylus tip.

4. (Amended) A surface sensing device according to claim ~~1~~ 3 wherein the stylus forms part of a stylus assembly which comprises a relatively stiff stylus carrier and a relatively flexible stylus.

5. (Amended) A surface sensing device according to claim ~~4~~ 3 wherein the stylus carrier is connected to a housing of the device and the light source and detector are mounted to the housing.

A